PRESENTATION OF THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

Please cancel claims 3 and 14 without prejudice.

Listing of Claims:

1.   (Currently Amended) A data handling apparatus capable of operating in a system in which two or more devices are connected by a data bus for the transmission of communications therebetween, the data bus having two or more data lines and each of the two or more devices having:

two or more data bus connectors, each for connection to a respective data line of the data bus;

an identity acquisition unit capable of functioning in a first mode of operation of the device to receive data transmitted over the data bus and in response to the order in which the bits of one or more data words of a predetermined form are received on the data bus connectors during the first mode of operation determine an identity for the device and store the identity in an identity store of the device; and

a data handling unit capable of functioning in a second mode of operation of the device to handle communications transmitted over the bus and that specify the identity stored in the identity store as a destination; and

a multiplexing arrangement located between the data bus connectors and the data handling unit and arranged to, in at least the second mode of operation, re-order in accordance with the stored identity data received from at least two of the data lines of the bus and passed to the data handling unit.

2. (Previously Presented) A data handling apparatus as claimed in claim 1, wherein the identity acquisition unit is arranged to process each of the one or more data words of a predetermined form in accordance with a look-up table in order to determine the identity for the device.

3. (Canceled).

4. (Currently Amended) A data handling apparatus as claimed in claim 1 3, wherein the multiplexing arrangement is a hardware multiplexing arrangement.

5. (Currently Amended) A data handling apparatus as claimed in claim 1 3, wherein the identity acquisition unit is arranged to determine the identity in accordance with a deviation in the order of at least some of the bits from a standard order of each of the one or more data words, and the multiplexing arrangement is arranged to re-order the data lines of the bus so as to restore the standard order to the bits as applied to the data handling unit.

6. (Previously Presented) A data handling apparatus as claimed in claim 1, wherein the device is a data processor.

7. (Previously Presented) A data handling apparatus as claimed in claim 1, wherein the device is a memory device.

8. (Previously Presented) A data handling apparatus as claimed in claim 1, wherein the device is defined on an integrated circuit and the data bus connectors are connectors for communicating with the integrated circuit.

9. (Currently Amended) A data handling system comprising two or more data handling devices, each of the two or more data handling devices comprising:

a data bus;

two or more data bus connectors, each for connection to a respective data line of the data bus;

an identity acquisition unit capable of functioning in a first mode of operation of the device to receive data transmitted over the data bus and in response to the order in which the bits of one or more data words of a predetermined form are received on the data bus connectors

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during the first mode of operation determine an identity for the device and store the identity in an identity store of the device; and

a data handling unit capable of functioning in a second mode of operation of the device to handle communications transmitted over the bus and that specify the identity stored in the data store as a destination; and

a multiplexing arrangement located between the data bus connectors and the data handling unit and arranged to, in at least the second mode of operation, re-order in accordance with the stored identity data received from at least two of the data lines of the bus and passed to at least one of the data handling unit.

10. (Original) A data handling system as claimed in claim 9, comprising a further device connected to the bus and capable of functioning to transmit the said one or more data words of a predetermined form over the data bus.

11. (Original) A data handling system as claimed in claim 10, wherein the further device is capable of triggering the data handling devices to enter the first mode of operation.

12. (Previously Presented) A data handling system as claimed in claim 10, wherein the data handling devices are arranged to automatically enter the first mode of operation upon initialisation of the system.

13. (Currently Amended) A method for assigning an identity to each of two or more devices of a data handling apparatus capable of operating in a system in which said two or more devices are connected by a data bus for the transmission of communications therebetween, the data bus having two or more data lines and the device having two or more data bus connectors, each connected to a respective data line of the data bus, the method comprising:

in a first mode of operation of the device, receiving data transmitted over the data bus and in response to the order in which the bits of one or more data words of a predetermined form are received on the data bus connectors during the first mode of operation determining an identity for the device; and

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storing the identity in an identity store of the device;

in a second mode of operation of the device, handling by means of a data handling unit of the device communications transmitted over the bus and that specify the identity stored in the identity store as a destination; and

in at least the second mode of operation, re-ordering the data lines, via a multiplexing arrangement located between the data bus connectors and the data handling unit, in accordance with the stored identity data received from at least two of the data lines of the bus and passed to the data handling unit.

14. (Canceled).